

[0020] FIGS. 8A-8C illustrate a standby screen displayed on a mobile terminal according to another embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

[0021] In the following detailed description reference is made to the accompanying drawing figures which form a part hereof, and which show by way of illustration specific embodiments of the invention. It is to be understood by those of ordinary skill in this technological field that other embodiments may be utilized, and structural, electrical, as well as procedural changes may be made without departing from the scope of the present invention. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or similar parts.

[0022] FIG. 1 is a block diagram of mobile terminal 100 in accordance with an embodiment of the present invention. The mobile terminal may be implemented using a variety of different types of terminals. Examples of such terminals include mobile phones, user equipment, smart phones, computers, digital broadcast terminals, personal digital assistants, portable multimedia players (PMP) and navigators. By way of non-limiting example only, further description will be provided with regard to a mobile terminal. However, such teachings apply equally to other types of terminals. FIG. 1 shows the mobile terminal 100 having various components, but it is understood that implementing all of the illustrated components is not a requirement. Alternatively, more components may be implemented.

[0023] FIG. 1 illustrates a wireless communication unit 110 configured with several commonly implemented components. As illustrated, the wireless communication unit 110 typically includes one or more components which permit wireless communication between the mobile terminal 100 and a wireless communication system or network within which the mobile terminal is located.

[0024] The broadcast receiving module 111 may receive both a broadcast signal and associated broadcast information from an external broadcast managing entity via a broadcast channel. The broadcast channel may include a satellite channel and a terrestrial channel. The broadcast managing entity refers generally to a system which transmits broadcast signals and associated broadcast information. Examples of associated broadcast information include information associated with a broadcast channel, a broadcast program, and a broadcast service provider. Specifically, associated broadcast information may include an electronic program guide (EPG) of digital multimedia broadcasting (DMB), and electronic service guide (ESG) of digital video broadcast-handheld (DVB-H).

[0025] The broadcast signal may be implemented as one of a TV broadcast signal, a radio broadcast signal, and a data broadcast signal. The broadcast signal may further include a broadcast signal combined with a TV or radio broadcast signal.

[0026] The broadcast receiving module 111 may be configured to receive broadcast signals transmitted from various types of broadcast systems. By non-limiting example, such broadcasting systems include digital multimedia broadcasting-terrestrial (DMB-T), digital multimedia broadcasting-satellite (DMB-S), DVB-H, the data broadcasting system known as media forward link only (MediaFLO®) and integrated services digital broadcast-terrestrial (ISDB-T). It is

also possible to receive multicast signals. The data received by the broadcast receiving module 111 may be stored in a memory 160.

[0027] The mobile communication module 112 transmits and receives wireless signals to/from one or more network entities. The signals may represent audio, video, multimedia, control signaling, and data.

[0028] The wireless internet module 113 supports Internet access for the mobile terminal. This module may be internally or externally coupled to the terminal.

[0029] The short-range communication module 114 facilitates relatively short-range communications. Suitable technologies for implementing this module include radio frequency identification (RFID), infrared data association (IrDA), ultra-wideband (UWB), as well as networking technologies commonly referred to as Bluetooth and ZigBee.

[0030] Position-location module 115 identifies or obtains the location of the mobile terminal. This module may be implemented using global positioning system (GPS) components which cooperate with associated satellites, network components, and combinations thereof.

[0031] The Audio/video (A/V) input unit 120 is configured to provide audio or video signal input to the mobile terminal. As illustrated in FIG. 1, the A/V input unit 120 includes a camera 121 and a microphone 122. The camera receives and processes image frames of still pictures or video.

[0032] The microphone 122 receives an external audio signal while the portable device is in one of a phone call mode, recording mode or voice recognition mode. This audio signal is processed and converted into digital data. The A/V input unit 120 typically includes assorted noise removing algorithms to remove noise generated in the course of receiving the external audio signal. Data generated by the A/V input unit 120 may be stored in memory 160, utilized by output unit 150, or transmitted via one or more modules of the communication unit 110. If desired, two or more microphones or cameras may be used.

[0033] The user input unit 130 generates input data responsive to user manipulation of an associated input device or devices. Input devices may include a keypad, a dome switch, a touchpad, e.g., static pressure/capacitance, a jog wheel and a jog switch. The user input unit 130 may be configured as a touchpad in cooperation with a touch screen display, as described in more detail below.

[0034] The sensing unit 140 provides status measurements of various aspects of the mobile terminal. For example, the sensing unit may detect an open/close status of the mobile terminal, relative positioning of display and keypad components of the mobile terminal, a change of position of the mobile terminal or a component of the mobile terminal, a presence or absence of user contact with the mobile terminal, and orientation or acceleration/deceleration of the mobile terminal.

[0035] As an example, consider the mobile terminal 100 being configured as a slide-type mobile terminal. In this configuration, the sensing unit 140 may sense whether a sliding portion of the mobile terminal is open or closed. Other examples include the sensing unit 140 sensing the presence or absence of power provided by the power supply 190, the presence or absence of a coupling or other connection between the interface unit 170 and an external device.

[0036] The interface unit 170 is configured to couple the mobile terminal with external devices. Typical external devices include wired and wireless headphones, external